

Customer No.: 31561
Application No.: 10/063,910
Docket No.: 7794-US-PA

REMARKS

Present Status of the Application

The Office Action rejected all presently-pending claims 1-19. Specifically, the Office Action rejected claims 1-19 under 35 U.S.C. 112, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Office Action also rejected claims 1-19 under 35 U.S.C. 103(a) as being unpatentable over Higuchi (U.S. 6,132,652) in view of the admitted prior art. Applicants have amended claims 1-19 to overcome the rejections. After entry of the foregoing amendments, claims 1-19 remain pending in the present application, and reconsideration of those claims is respectfully requested.

Discussion of Office Action Rejections

Applicants respectfully traverse the rejection of claims 1-19 under 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter because Applicants have amend claims 1, 4-6, 8, 11-13, 15, 18-19.

Applicants amend "...the optical thin film and a polarizer..." to -- ...the optical thin film comprising at least a polarizer... -- in claims 1, 8, 15 to overcome the rejection. Applicants delete the word "type" in claims 5, 6, 12, 13, 18, 19. Applicants also amend "...the step of injecting the light-guide material includes injection molding, compression molding and injection

Customer No.: 31561
Application No.: 10/063,910
Docket No.: 7794-US-PA

compression molding.” to --...the mold includes an injection mold, a compression mold and an injection compression mold.-- in claims 4, 11.

In addition, the standing type machine and the lying type machine for injection molding step are described in paragraph [0021] of the specification. That is, while the lying type machine is used to form the integrated structure 204 of the polarizer 202 and the light-guide board 200, the polarizer 202 is fixed in the first space 212 using a vacuum suction. If a standing type machine is used, gravitation force is directly applied to dispose the polarizer 202 in the first space 212 of the mold 210. In the other word, the optical thin film (polarizer) is disposed in the mold through gravitation force in the standing type machine while the optical thin film (polarizer) is disposed in the mold through a vacuum suction in the lying type machine.

Applicants respectfully traverse the rejection of claims 1-19 under 103(a) as being unpatentable over Higuchi (U.S. 6,132,652) in view of the admitted prior art because a prima facie case of obviousness has not been established by the Office Action.

To establish a prima facie case of obviousness under 35 U.S.C. 103(a), each of three requirements must be met. First, the reference or references, taken alone or combined, must teach or suggest each and every element in the claims. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skilled in the art, to combine the references in a manner resulting in the claimed invention. Third, a reasonable expectation of success must exist. Moreover, each of the three

Customer No.: 31561
Application No.: 10/063,910
Docket No.: 7794-US-PA

requirements must “be found in the prior art, and not be based on applicant’s disclosure.” See M.P.E.P. 2143, 8th ed., February 2003.

The present invention is in general related a integrated device having a capacitor in an interconnect system as claims 1, 8 and 15 recite:

Claim 1. A method of integrally forming an integrated structure of a light-guide board and an optical thin film, comprising:

providing a mold and the optical thin film comprising at least a polarizer, wherein the mold has a first space and a second space, and the first space has a surface on which no pattern is formed;

disposing the optical thin film in the first space of the mold; and
injecting a light-guide material into the second space of the mold.

Claim 8. A method of integrally forming a structure of a light-guide board and an optical thin film, comprising:

providing a mold and the optical thin film comprising at least a polarizer;

disposing the optical thin film on one surface of the mold, wherein the surface has no pattern thereon; and

injecting a light-guide material in the mold to fill another space without the optical thin film, and curing the light-guide material to form a light-guide board adhered to the optical thin film.

Claim 15. (currently amended) A method of integrally forming a structure with a light-guide board and an optical thin film, comprising:

disposing the optical thin film comprising at least a polarizer on a first surface of the mold, wherein the first surface has no pattern thereon ; and

forming the light-guide board on a second surface opposing to the optical thin film via an injection molding, a compression molding or an injection compression molding step, wherein the second surface has a pattern thereon.

Higuchi et al. discloses a method of producing a light-guide plate, as shown in Fig. 6, 7 and 8, including providing a first mold 101 and a second mold 102 that are separated from each other. Especially, the second mold 102 is provided with a feeder 108 for arranging a stamping foil 109 at the front of the fitting surface 102b (col. 10, lines 23-25). The stamping foil 109 is composed of several layers comprising an opaque layer 109d for reflecting light (col. 10, lines 31-39). Thereafter, the second mold 102 is moved toward the first mold 101 to couple the molds to each other and PMM is injected into the cavity 103 (col. 10 lines 57-60). After the filling step and the step of cooling PMMA resin, a light-guide 104 is obtained where a concavo-convex pattern corresponding to the fine pattern of the plate shaped mold is formed on the light emitting surface 104a. The opaque layer 109d and other coating layers are transferred to the light transmission preventing surface 104b. Higuchi et al. also discloses a light-guide plate as shown in Fig. 4, the light-guide plate 40 has concavo-convex pattern on its light emitting surface 40a and light transmission preventing surface 40b.

In claims 1, 8, and 15, the optical thin film comprising at least a polarizer is disposed on *a surface on which no pattern is formed* (described in [0020]). In claim 15, the light-guide board is formed on a second surface opposing to the optical thin film via an injection molding, a compression molding or an injection compression molding step, wherein *the second surface has a pattern thereon* (described in [0021]). Because the optical thin film of the invention is not for light reflecting, the surface of the mold contacting with the optical thin film has no pattern thereon and is smooth. If the surface of the mold contacting with the optical thin film has a

Customer No.: 31561
Application No.: 10/063,910
Docket No.: 7794-US-PA

pattern thereon, the pattern will be transferred to the optical thin film integrated with the light-guide board after molding process. That may cause the polarizer failing.

Higuchi only teaches that the reflective layer and a light-guide plate are formed with a mold machine. Higuchi does not disclose or suggest other film layers of backlight module, such as the polarizer or other optical thin films, can also be formed with the mold machine. In the other words, Higuchi does not disclose or suggest that an optical thin film comprising at least a polarizer and a light-guide board can be formed with a molding step, and the optical thin film is disposed on one surface of the mold having no pattern thereon. In the admitted prior art, the polarizer and the light-guide board fabricated respectively are adhered to each other with an adhesive material, and thus an additional step for adhering the two is required. The admitted prior art does not describe the polarizer and the light-guide board can be formed with a molding machine. Hence, the admitted prior art can not cure the deficiencies of Higuchi.

For at least the foregoing reasons, Applicant respectfully submits that independent claims 1, 8 and 15 patently define over the prior art references, and should be allowed. For at least the same reasons, dependent claims 2-7, 9-14, 16-19 patently define over the prior art as well.

Customer No.: 31561
Application No.: 10/063,910
Docket No.: 7794-US-PA

CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-19 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

Date :

August 30, 2004


Belinda Lee

Registration No.: 46,863

Jianq Chyun Intellectual Property Office
7th Floor-1, No. 100
Roosevelt Road, Section 2
Taipei, 100
Taiwan
Tel: 011-886-2-2369-2800
Fax: 011-886-2-2369-7233
Email: belinda@jcipgroup.com.tw
Usa@jcipgroup.com.tw